

## Appendix A



### BIOGRAPHICAL SKETCH

NAME	POSITION TITLE			
Tibor Keler	Vice President and Chief Scientific Officer, Celldex Therapeutics, Inc.			
EDUCATION/TRAINING				
INSTITUTION AND LOCATION		DEGREE	YEAR(s)	FIELD OF STUDY
Drexel University, Philadelphia, PA		B.S.	1982	Unified Science
Drexel University, Philadelphia, PA		M.S.	1984	Biology
University of Pennsylvania, Philadelphia, PA		Ph.D.	1989	Microbiology

#### A. Positions and Honors

##### Research Training

1987-1989	Guest Researcher: National Cancer Institute, National Institutes of Health, Bethesda, MD.
1989-1992	Postdoctoral Associate: Institute for Cancer Research, Fox Chase Cancer Center, Philadelphia, PA.
1992-1993	Research Associate: Institute for Cancer Research, Fox Chase Cancer Center, Philadelphia, PA.
1993-1997	Principal Scientist, Research & Development, Medarex, Inc., Bloomsbury, NJ.
1997-1998	Assistant Director, Immunobiology: Medarex, Inc., Bloomsbury, NJ.
1998-1999	Associate Director, Immunobiology: Medarex, Inc., Annandale NJ.
1999-2001	Director, Pre-clinical Development: Medarex, Inc. Bloomsbury, NJ.
2001-2004	Senior Director, Pre-clinical Development: Medarex, Inc. Bloomsbury, NJ.
2004-2005	Vice President, Research and Development, Celldex Therapeutics, Inc. Bloomsbury, NJ
2006-present	Vice President and Chief Scientific Officer, Celldex Therapeutics, Inc. Phillipsburg, NJ

##### Honors, Scholarships, Fellowships

1982	Graduated with second honors in Unified Science, Drexel University
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##### Professional Societies

American Association of Immunologists  
American Society for Biochemical and Molecular Biology  
American Association for Cancer Research  
American Society for Microbiology  
International Endotoxin Society

##### Issued Patents

Therapeutic multispecific compounds comprised of anti-Fc $\alpha$  receptor antibodies; US Patent Application 20010014328.

Cells expressing anti-Fc $\gamma$  Receptor binding components; US Patent Application 6682928.

Human CTLA-4 Antibodies; US Patent 6,984,720.

#### B. Peer-Reviewed Publications

1. Mochan E, Keler T. Plasmin degradation of cartilage proteoglycan. Biochem Biophys Acta 1984;800:312-316.
2. Keler T, Nowotny A. Metachromatic assay for the quantitative determination of bacterial endotoxins. Anal Biochem 1986;156:189-192.

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3. Friedman H, Blanchard DK, Newton C, Klein T, Stewart W, Keler T, et al. Distinct immunomodulatory effects of endotoxin and non-toxic lipopolysaccharide derivatives in lymphoid cultures. *J Biol Response Mod* 1987;6:664-671.
4. Keler T, Kovats E, Nguyen V, Samu J, Solmyo B, Nowotny A. Cytotoxicity of a novel lipid like bacterial product. *Biochem Biophys Res Comm* 1987;149:1033-1037.
5. Samu J, Kovats E, Nguyen V, Keler T, Nowotny A, Coughlin RT Thin-layer chromatography of endotoxins, their derivatives and contaminants. *J Chromat* 1988;435:167-173.
6. Nowotny A, Keler T, Pham PH, Kovats E, Aiello A, Shonekan O, et al. Isolation of a non-endotoxic anti-tumor preparation from *Serratia marcescens*. *J Biol Response Mod* 1988;7:296-308.
7. Keler T, Smith CAD, Nowotny A. Chemistry and biology of a novel lipid contaminant of some endotoxin preparations with selective cytotoxicity to transformed cells. *Adv in Exper Med and Biol* 1988;256:163-184.
8. Keler T, Smith CAD. Effects on growth and energy metabolism in untransformed and transformed fibroblasts by a novel cytotoxic compound. *Cancer Res* 1989;49:7093-7097.
9. Solmyo B, Kovats E, Keler T, Nowotny A. Column chromatography of endotoxins. *J Chromatogr* 1990;525:329-338.
10. Barker CS, Bear SE, Keler T, Copeland NG, Gilbert DJ, Jenkins NA, et al. Activation of the prolactin receptor gene by promoter insertion in a Moloney murine leukemia virus-induced rat thymoma. *J Virol* 1992;66:6763-6768.
11. Keler T, Barker C, Sorof S. Linoleic acid specifically stimulates the growth of hepatoma cell lines transfected with the target protein of a liver carcinogen. in "Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation, and Radiation Injury" (Nigam, S., Honn, K.J., Marnett, L.J., Walden, T. eds.) Kluwer Academic Publishers, Inc., Boston, MA. pp 435-438, 1992.
12. Keler T, Barker C, Sorof S. Specific growth stimulation in hepatoma cell lines transfected with the target protein of a liver carcinogen. *Proc Natl Acad Sci USA* 1992;89:4830-4834.
13. Keler T, Sorof S. Growth promotion in hepatoma cells expressing liver fatty acid binding protein. *J Cell Physiol* 1993;157:33-40.
14. Keler T, Khan S, Sorof S. Liver fatty acid binding protein and mitogenesis in transfected hepatoma cells. in "Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation, and Radiation Injury" (Honn, K.J., Marnett, L.J., Nigam, S. eds.) Kluwer Academic Publishers, Inc., Boston, MA. 1994.
15. Graziano RF, Tempest PR, White P, Keler T, Deo Y, Ghebremariam H, et al. Construction and characterization of a Humanized Anti-g-Ig Receptor Type I (FcγRI) Monoclonal Antibody. *J. Immunol* 1995;155:4996-5002.
16. Gorny MK, Keler T, Burda S, Williams C, Gabriel JL, Mitchell WM, et al. Functional studies of bispecific antibodies directed against HIV-1 and the Fcγ receptor type I. *Antibiot Chemother* 1996;48:173-183.
17. Keler T, Li H, Cloyd M, Vitale L A, Deo YM. Development of T cell lines expressing functional HIV-1 envelope glycoproteins for evaluation of immune responses in HIV infected persons. *J AIDS and Human Retroviruses* 1996;13:117-126.
18. Wallace PK, Keler T, Coleman K, Fisher J, Vitale L, Graziano RF, et al. Humanized mAb H22 binds the human high affinity Fc receptor for IgG (FcγRI), blocks phagocytosis, and modulates receptor expression. *J Leukocyte Biol* 1997;62:469-479.

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19. Keler T, Graziano RF, Mandal A, Wallace PK, Fisher J, Guyre PM, et al. Bispecific antibody-dependent cellular cytotoxicity of HER2/*neu*-over-expressing tumor cells by Fc $\gamma$  receptor type I-expressing effector cells. *Cancer Res* 1997;57:4008-4014.
20. Wallace PK, Keler T, Guyre PM, Fanger MW. Fc $\gamma$ RI blockade and modulation for immunotherapy. *Cancer Immunol Immunotherapy* 1997;45:137-141.
21. Graziano RF, Goldstein J, Sundarapandiyam K, Somasundaram C, Keler T, Deo YM. Targeting tumor cell destruction with CD64-directed bispecific fusion proteins. *Cancer Immunol Immunotherapy* 1997;45:124-127.
22. Deo YM, Sundarapandiyam K, Keler T, Wallace P, Graziano RF. Bispecific molecules directed to the Fc receptor for IgA (Fc $\alpha$ RI, CD89) and tumor antigens efficiently promote cell-mediated cytotoxicity of tumor targets in whole blood. *J Immunol* 1997;160:1677-1686.
23. Heijnen I, Rijks L, Schiel A, Stockmeyer B, van Ojik H, Repp R, Valerius T, Keler T, et al. Combined administration of G-CSF and anti-Fc $\gamma$ RI bispecific antibodies efficiently generates HER-2/*neu*-specific cytotoxic neutrophils. *J Immunol* 1997;159:5629-5639.
24. Russoniello C, Somasundaram C, Schlom J, Deo YM, Keler T. Characterization of a novel bispecific antibody that mediates Fc $\gamma$ RI-dependent killing of TAG-72-expressing tumor cells. *Clin Cancer Res* 1998;4:2237-2243.
25. Somasundaram C, Sundarapandiyam K, Keler T, Deo YM, Graziano RF. Development of a trispecific antibody conjugate that directs two tumor-associated antigens to CD64 on myeloid effector cells. *Human Antibodies* 1999;9:47-54.
26. Somasundaram C, Sundarapandiyam K, Keler T, Deo YM, Graziano RF. Development of a trispecific antibody that directs two distinct tumor-associated antigens to CD64 on myeloid effector cells. *Human Antibodies* 1999;9(1):47-54.
27. Posey JA, Raspet R, Verma U, Deo YM, Keler T, Marshall JL, et al. A pilot trial of GM-CSF and MDX-H210 in patients with erbB-2 positive advanced malignancies. *J Immunother* 1999;22:371-379.
28. van Vugt MJ, Kleijmeer MJ, Keler T, Zeelenberg I, van Dijk MA, Geuze HJ, et al. The Fc $\gamma$ RIa (CD64) ligand binding chain triggers MHC class II antigen presentation independently of its associated FcR  $\gamma$ -chain. *Blood* 1999;94(2):808-17.
29. Keler T, Wallace PK, Vitale LA, Russoniello C, Sundarapandiyam K, Graziano RF, et al. Differential effect of cytokine treatment on Fc $\alpha$ RI and Fc $\gamma$ RI mediated tumor cytotoxicity by monocyte derived macrophages. *J Immunol* 2000;164(11):5746-52.
30. Keler T, Guyre PM, Vitale LA, Sundarapandiyam K, van de Winkel JGJ, Deo YM, et al. Targeting weak antigens to CD64 elicits potent humoral responses in human CD64 transgenic mice. *J Immunol* 2000;165(12):6738-42.
31. Wiener E, Mawas F, Coates P, Hossain AK, Perry M, Snachall S, Deb P, Rodeck CH, Keler T. HPA-1a-mediated platelet interaction with monocytes in vitro: involvement of Fc $\gamma$  receptor (Fc $\gamma$ R) classes and inhibition by humanised monoclonal anti-Fc $\gamma$ RI H22. *Eur J Haematol* 2000;65:399-406.
32. Sundarapandiyam K, Keler T, Behnke D, Engert A, Barth S, Matthey B, et al. Bispecific antibody-mediated destruction of Hodgkin's lymphoma cells. *J Immunol Methods* 2001;248:113-23.
33. Guyre CA, Keler T, Swink SL, Vitale LA, Graziano RF, Fanger MW. Receptor modulation by Fc gamma RI-specific fusion proteins is dependent on receptor number and modified by IgG. *J Immunol* 2001;167:6303-11.

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34. Wallace PK, Kaufman PA, Lewis LD, Keler T, Givan AL, Fisher JL, et al. Bispecific antibody-targeted phagocytosis of HER-2/neu expressing tumor cells by myeloid cells activated in vivo. *J Immunol Methods* 2001;248:167-82.
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38. Ramakrishna V, Trembl JF, Vitale L, Connolly JE, O'Neill T, Smith P, Jones CL, He L, Goldstein J, Wallace PK, Keler T, and Endres MJ. Mannose receptor targeting of tumor antigen pmel17 to human dendritic cells directs anti-melanoma T cell responses via multiple HLA molecules. *J Immunol*. 2004 Mar 1;172(5):2845-52.
39. He L, Ramakrishna V, Connolly JE, Wang XT, Smith PA, Jones CL, Valkova-Vachnova M, Arunakumari A, Trembl JF, Goldstein J, Wallace PK, Keler T and Endres MJ. A novel human cancer vaccine elicits cellular responses to the tumor-associated antigen, human chorionic gonadotropin beta. *Clinical Cancer Research* 2004 March 15; 10 (6).
40. Keler, T.; Ramakrishna, V.; Fanger, M. W. Mannose receptor-targeted vaccines. *Expert Opin Biol Ther*. 2004, 4: 1953-62.
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42. Sanderson K, Scotland R, Lee P, Liu D, Groshen S, Snively J, Sian S, Nichol G, Davis T, Keler T, Yellin M, Weber J. Autoimmunity in a Phase I Trial of a Fully Human Anti-Cytotoxic T-Lymphocyte Antigen-4 Monoclonal Antibody With Multiple Melanoma Peptides and Montanide ISA 51 for Patients With Resected Stages III and IV Melanoma. *J Clin Oncol*. 2005 Feb 1;23(4):741-50.
43. van Royen-Kerkhof A, Sanders EA, Walraven V, Voorhorst-Ogink M, Saeland E, Teeling JL, Gerritsen A, van Dijk MA, Kuis W, Rijkers GT, Vitale L, Keler T, McKenzie SE, Leusen JH, van de Winkel JG. A novel human CD32 mAb blocks experimental immune haemolytic anaemia in FcgammaRIIA transgenic mice. *Br J Haematol*. 2005 Jul;130(1):130-7.
44. Korman A, Yellin M, Keler T. Tumor immunotherapy: preclinical and clinical activity of anti-CTLA4 antibodies. *Curr Opin Investig Drugs*. 2005 Jun;6(6):582-91.
45. Keler T, He L, Graziano RF. Development of antibody-targeted vaccines. *Curr Opin Mol Ther*. 2005 Apr;7(2):157-63.
46. Bevaart L, Goldstein J, Vitale L, Russoniello C, Trembl J, Zhang J, Graziano RF, Leusen JH, van de Winkel JG, Keler T. Direct targeting of genetically modified tumour cells to Fc gammaRI triggers potent tumour cytotoxicity. *Br J Haematol*. 2006 Feb;132(3):317-25.